

INSTRUCTION SHEET

Slide Actuator For HS5 Interlock Switches HS5 Series

Confirm that the delivered product is what you have ordered. Read this instruction sheet to make sure of correct operation. Make sure that the instruction sheet is kept by the end user.

Safety Precautions

In this operation instruction sheet, safety precautions are categorized in order of importance to Warning and Caution :

WARNING

Warning notices are used to emphasize that improper operation may cause severe personal injury or death.

CAUTION

Caution notices are used where inattention might cause personal injury or damage to equipment.

1 Type

HS9Z-SH5

2 Specifications

Applicable model	• HS5D interlock switch with metal head • HS5E/HS5L interlock switch
Weight (approximately)	125g
Mechanical durability	1,000,000 operations min.
Stroke of operation	40.0mm
Direct Opening Force	HS5D:70N minimum HS5E:80N minimum HS5L:120N minimum

- Interlock switch is not supplied with HS9Z-SH5 and must be ordered separately.
- Refer to the specifications of the HS5D/HS5E/HS5L interlock switch for the specifications of the interlock switch used.

3 Precautions for Operation

CAUTION

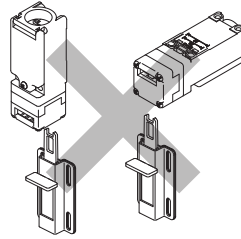
- Do not use HS9Z-SH5 with HS5D interlock switch of plastic head type

WARNING

- When using the HS9Z-SH5 for safety-related equipment in a control system, refer to the safety standards and regulations in each country and region depending on the application purpose of the actual machines and installations to make sure of correct operation. Also, perform risk assessment to make sure of safety before starting operation.

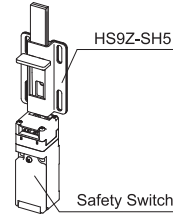
- Read the instruction sheet of the interlock switch used.
- Note the projections on the HS9Z-SH5 when using to prevent injury.
- Regardless of door types, do not use the HS9Z-SH5 as a door lock. Install a separate lock such as a metal hook.
- When the direction to insert the HS9Z-SH5 into the interlock switch is different from the opening/closing direction of the door, do not open the door while the HS9Z-SH5 is inserted into the interlock switch.

- When a worker enters the danger zone, take a measure such as using Padlock Hasp (HS9Z-PH5) together so that the worker is not confined, and the machine is not started by mistake.
- Do not insert the HS9Z-SH5 from below as shown in the figure on the right. Otherwise the HS9Z-SH5 may fall because of vibration.



- Ensure that the actuator is inserted completely. Loose insertion may cause instable operation of contacts. Also, loose insertion may inhibit the door from opening, causing the damage on the actuator.

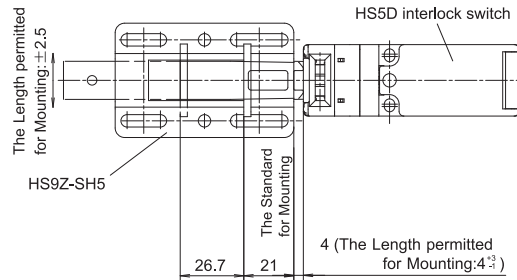
- Take care not to catch your finger and your hands when sliding the actuator.
- When the actuator is inserted from above as shown in the figure on the right, do not apply excessive shock (100m/s² or more) to the HS9Z-SH5 when the actuator is removed, otherwise malfunction will be caused.



- The HS9Z-SH5 can be used for HS5D with metal head/HS5E/HS5L interlock switch only. Do not use the HS9Z-SH5 for other products.
- Do not ruin the functions of the HS9Z-SH5 by modifying or disassembling.

4 Adjustment

- The standard for Mounting the actuator



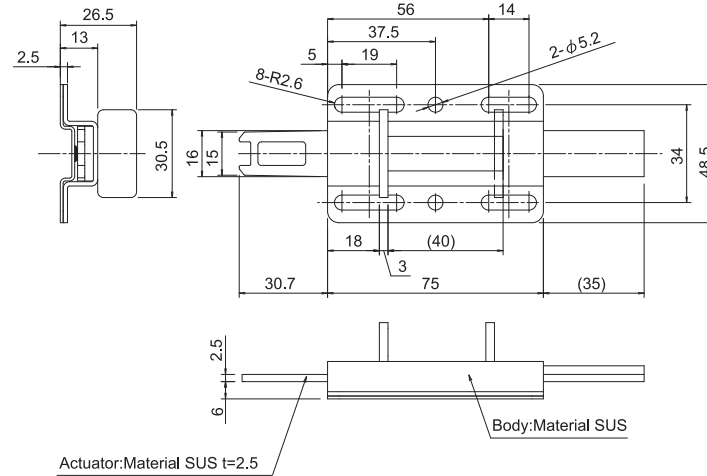
Recommended screw Tightening Torque

Name or Use	Screw Tightening Torque
For mounting the HS9Z-SH5 (M5 screw)*1	4.5~5.5 N · m

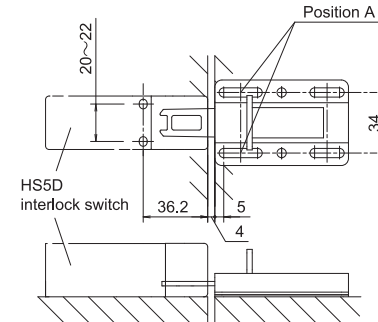
*1: The above recommended tightening torques of the mounting screw are the values confirmed with hex socket head bolts. When other screws are used and tightened to a smaller torque, make sure that the screws do not become loose after mounting.

5 Dimensions (mm)

- Dimension

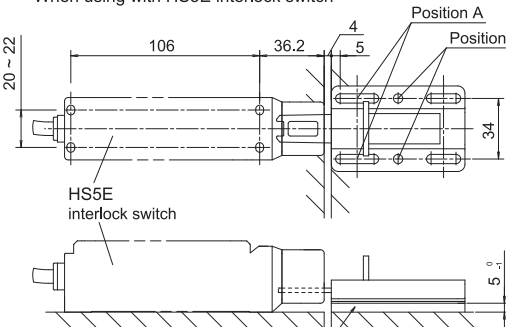


- When using with HS5D interlock switch



- * When using with HS5D interlock switch, fixate the actuator on at least two positions (position A) shown above, using mounting screws.

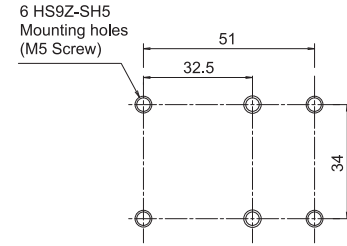
- When using with HS5E interlock switch



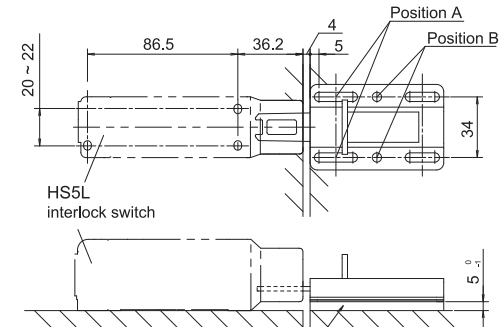
The plate to adjust the height (Not supplied with the HS9Z-SH5) Recommend thickness: 5.3mm

- * When using with HS5E interlock switch, make holes on the height adjustment plate and fixate the actuator on at least four positions (positions A and B) shown above, using mounting screws.

- Mounting Hole Layout



- When using with HS5L interlock switch



The plate to adjust the height (Not supplied with the HS9Z-SH5) Recommend thickness: 5.3mm

- * When using with HS5L interlock switch, make holes on the height adjustment plate and fixate the actuator on at least four positions (positions A and B) shown above, using mounting screws.

6 Precaution for Disposal

- Dispose of the HS9Z-SH5 as an industrial waste.